

Claims

1. A sensor in or for use in a medical training system, the sensor comprising:

a simulation of a body structure, the body structure comprising at least one compartment for containing a mobile substance; and

sensing means for detecting pressure applied to the body structure.
2. A sensor according to claim 1, wherein the sensing means detects displacement of the mobile substance from the or each compartment.
3. A sensor according to claim 1, wherein the sensing means detects changes in the internal pressure of the or each compartment.
4. A sensor according to any one of claims 1-3, wherein the mobile substance is a fluid.
5. A sensor according to any one of claims 1-3, wherein the mobile substance is a free flowing solid.
6. A sensor according to claim 4, wherein the or each compartment is in communication with a fluid containing reservoir.
7. A sensor according to claim 6, wherein the reservoir comprises pump means for increasing or decreasing the volume of fluid in the or each fluid containing compartment.
8. A sensor according to claim 7, wherein the pump means is connected to control means for controlling the volume of fluid in the or each fluid compartment.
9. A sensor according to claim 8, wherein the control means is provided with a variety of predetermined fluid volumes corresponding to a variety of different anatomical conditions.

10. A sensor according to any one of claims 4-9, as dependent on claim 2, wherein the sensing means generates a signal corresponding to the fluid displaced from the or each compartment.
11. A sensor according to claim 10, wherein the signal corresponds to the volume of fluid displaced from the or each compartment.
12. A sensor according to claim 10 or claim 11, wherein the signal corresponds to the pressure of the displaced fluid.
13. A sensor according to any one of claims 4-9, as dependent on claim 3, wherein the sensing means generates a signal corresponding to the pressure change.
14. A sensor according to any one of claims 10-13, wherein the signal is fed to a feedback presentation unit which provides feedback to a user.
15. A sensor according to any preceding claim, wherein the simulated body structure corresponds to a simulated human internal body structure.
16. A sensor according to claim 15, wherein the simulated internal body structure comprises a simulated organ.
17. A sensor according to claim 15, wherein the simulated internal body structure comprises a simulated soft tissue structure.
18. A medical training system for diagnostic examinations performed on the human body by palpation comprising:

a simulation of a human anatomical structure, the anatomical structure having an outer surface and an internal cavity;

one or more sensors according to any preceding claim located within the internal cavity;
and

a feedback presentation unit in communication with the pressure sensing means for providing feedback to a user.

19. A system according to claim 18, wherein anatomical structure comprises a human torso.
20. A system according to claim 18, wherein the anatomical structure comprises a female breast.
21. A system according to claim 18, wherein the anatomical structure comprises a human head.
22. A system according to claim 18, wherein the anatomical structure comprises a human neck.
23. A system according to claim 18, wherein the anatomical structure comprises a human shoulder.
24. A system according to claim 18, wherein the anatomical structure comprises a human leg.
25. A system according to claim 18, wherein the anatomical structure comprises a human arm.
26. A system according to claim 18, wherein the anatomical structure comprises a human axilla.
27. A system according to claim 18, wherein the anatomical structure comprises a human pelvis.
28. A system according to claim 18, wherein the anatomical structure comprises a human knee.
29. A system according to claim 18, wherein the anatomical structure comprises a human foot.

30. A system according to any one of claims 18-29, wherein said simulation and said feedback presentation unit are adjustable to provide feedback for one of a plurality of different medical examinations.

31. A system according to any one of claims 18-30, wherein said medical examination comprises a set of predetermined steps and said feedback comprises an indication of completion of said set of predetermined steps.

32. A system according to any one of claims 18-31, wherein the feedback presentation unit comprises a display means.

33. A system according to claim 32, wherein said display means comprises a graphical display.

34. A system according to any one of claims 18-33, wherein said feedback presentation unit comprises a liquid crystal display.

35. A system according to any one of claims 18-34, wherein said feedback presentation unit comprises an analogue display unit.

36. A method of training examinations performed on the human body by palpation using a system according to any one of claims 18-36 comprising the steps of:

receiving signals from the sensor, wherein said signals are generated in response to palpation of the sensor; and

providing feedback to a user, wherein said feedback is derived, at least in part, from said signals.

37. A method of training examination according to claim 36, wherein the volume of fluid in the or each fluid containing compartment is altered to present the user with a variety of simulations representing increasing anatomical complexity or increasing clinical difficulty.